<u>Amendments to the Claims</u>:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A <u>computer-implemented</u> text sentence comparison method comprising:

converting a first text sentence and a second text sentence into a first R tree and a second R tree, respectively;

calculating a distance between the first R tree and the second R tree on the basis of a distance between two R trees, which is defined at least in accordance with a condition of a mapping between vertexes of the two R trees, the calculation of the distance between the first R tree and the second R tree including calculation of:

a distance between a forest, which the first R tree includes, and a forest, which the second R tree includes;

a distance between a subtree, which the first R tree includes, and a subtree, which the second R tree includes; and

a vertex mapping weight of a mapping from the first R tree to the second R tree; ~~and~~

calculating a distance between the first text sentence and the second text sentence on the basis of the following expression: the distance = (the calculated distance between the first R tree and the second R tree) / (a sum of vertexes in the first R tree and the second R tree),

wherein in the converting,

word information and case information in the first text sentence are assigned to respective vertexes of the first R tree so that at least one of the vertexes of the first R tree contains the word information and the case information in the first text sentence,

word information and case information in the second text sentence are assigned to respective vertexes of the second R tree so that at least one of the vertexes of the second R tree contains the word information and the case information in the second sentence, and

the vertex mapping weight is calculated on the basis of word substitution weight, word deletion weight, word insertion weight, case substitution weight, case deletion weight and case insertion ~~weight.~~weight; and

outputting the calculated distance between the first text sentence and the second text sentence as an indication of semantic content similarity between the sentences.

2.   (Canceled)

3.   (Previously Presented) The text sentence comparison method according to claim 1, wherein:

in the conversion:

words included in the first text sentence are allotted to vertexes of the first R trees; and

words included in the second text sentence are allotted to vertexes of the second R trees; and

the vertex mapping weight is calculated on the basis of word substitution weight, word deletion weight, and word insertion weight.

4.   (Canceled)

5.   (Original) The text sentence comparison method according to claim 1, further comprising:

setting the condition of the mapping between the two R trees.

6.   (Original) The text sentence comparison method according to claim 1, wherein the condition of the mapping between the two R trees includes:

the mapping is a one-to-one mapping;

the mapping preserves parent-child relationship; and

the mapping preserves structure.

7.   (Original) The text sentence comparison method according to claim 1, further comprising:

inputting the first text sentence and the second text sentence; and

outputting the calculated distance between the first text sentence and the second text sentence.

8.   (Currently Amended) A computer-implemented text sentence comparison method comprising:

converting a first text sentence and a second text sentence into a first RO tree and a second RO tree, respectively;

calculating a distance between the first RO tree and the second RO tree on the basis of a distance between two RO trees, which is defined at least in accordance with a condition of a mapping between vertexes of the two RO trees, the calculation of the distance between the first RO tree and the second RO tree including calculating:

a distance between a forest, which the first RO tree includes, and a forest, which the second RO tree includes;

a distance between a subtree, which the first RO tree includes, and a subtree, which the second RO tree includes; and

a vertex mapping weight of a mapping from the first RO tree to the second RO tree; and

calculating a distance between the first text sentence and the second text sentence on the basis of the calculated distance between the first RO tree and the second RO tree,

wherein in the converting,

word information and case information in the first text sentence are assigned to respective vertexes of the first RO tree so that at least one of the vertexes of the first RO tree contains the word information and the case information in the first text sentence, and

word information and case information in the second text sentence are assigned to respective vertexes of the second RO tree so that at least one of the vertexes of the second RO tree contains the word information and the case information in the second sentence, and

the vertex mapping weight is calculated on the basis of word substitution weight, word deletion weight, word insertion weight, case substitution weight, case deletion weight and case insertion ~~weight.~~weight; and

outputting the calculated distance between the first text sentence and the second text sentence as an indication of semantic content similarity between the sentences.

9.   (Canceled)

10.   (Previously Presented) The text sentence comparison method according to claim 8, wherein:

in the conversion:

words included in the first text sentence are allotted to vertexes of the first RO trees; and

words included in the second text sentence are allotted to vertexes of the second RO trees; and

the vertex mapping weight is calculated on the basis of word substitution weight, word deletion weight, and word insertion weight.

11.   (Canceled)

12.   (Original) The text sentence comparison method according to claim 8, further comprising:

        setting the condition of the mapping between the two RO trees.

13.   (Original) The text sentence comparison method according to claim 8, wherein the condition of the mapping between the two RO trees includes:

        the mapping is a one-to-one mapping;

        the mapping preserves parent-child relationship; and

        the mapping preserves brother relationship;

        the mapping preserves structure.

14.   (Original) The text sentence comparison method according to claim 8, further comprising:

        inputting the first text sentence and the second text sentence; and

        outputting the calculated distance between the first text sentence and the second text sentence.

15.   (Currently Amended) A text sentence comparison apparatus, the text sentence comparison apparatus containing a computer-readable medium storing a program of instructions executed by the computer, the program comprising:

        an input section for inputting a first text sentence and a second text sentence;

        a tree structure conversion section for converting the first text sentence and the second text sentence into a first R tree and a second R tree, respectively;

        a distance calculation section for calculating a distance between the first R tree and the second R tree on the basis of the following expression: the distance = (the calculated distance between the first R tree and the second R tree) / (a sum of vertexes in the first R tree and the second R tree), the distance calculation section also calculating:

a distance between a forest, which the first R tree includes, and a

forest, which the second R tree includes; and

a distance between a subtree, which the first R tree includes, and a

subtree, which the second R tree includes;

a semantic content comparison section for calculating a distance between the

first text sentence and the second text sentence on the basis of the calculated distance between

the first R tree and the second R tree; and

a mapping weight calculation section for calculating a vertex mapping weight

of mapping from the first R tree to the second R tree,tree; and

an output section for outputting the calculated distance between the first text

sentence and the second text sentence as an indication of semantic content similarity between

the sentences,

wherein in the tree structure conversion section,

word information and case information in the first text sentence are

assigned to respective vertexes of the first R tree so that at least one of the vertexes of the first

R tree contains the word information and the case information in the first text sentence,

word information and case information in the second text sentence are

assigned to respective vertexes of the second R tree so that at least one of the vertexes of the

second R tree contains the word information and the case information in the second sentence,

and

the vertex mapping weight is calculated on the basis of word

substitution weight, word deletion weight, word insertion weight, case substitution weight,

case deletion weight and case insertion weight.

16.   (Canceled)

17.   (Previously Presented) The text sentence comparison apparatus according to claim 15, wherein:

the tree structure conversion section

allots words included in the first text sentence to vertexes of the first R trees, and

allots words included in the second text sentence to vertexes of the second R trees; and

the vertex mapping weight calculation section calculates the vertex mapping weight on the basis of word substitution weight, word deletion weight, and word insertion weight.

18.   (Canceled)

19.   (Original) The text sentence comparison apparatus according to claim 15, further comprising:

a setting input section for allowing a user to set the condition of the mapping between the two R trees.

20.   (Original) The text sentence comparison apparatus according to claim 15, wherein the condition of the mapping between the two R trees includes:

the mapping is a one-to-one mapping;

the mapping preserves parent-child relationship; and

the mapping preserves structure.

21.   (Original) The text sentence comparison apparatus according to claim 15, further comprising:

an output section for outputting the calculated distance between the first text sentence and the second text sentence.

22.   (Currently Amended) A text sentence comparison apparatus, the text sentence comparison apparatus containing a computer-readable medium storing a program of instructions executed by the computer, the program comprising:

an input section for inputting a first text sentence and a second text sentence;

a tree structure conversion section for converting the first text sentence and the second text sentence into a first RO tree and a second RO tree, respectively;

a distance calculation section for calculating a distance between the first RO tree and the second RO tree on the basis of a distance between two RO trees, which is defined at least in accordance with a condition of a mapping between vertexes of the two RO trees, the distance calculation section also calculating:

a distance between a forest, which the first RO tree includes, and a forest, which the second RO tree includes;

a distance between a subtree, which the first RO tree includes, and a subtree, which the second RO tree includes; and

a vertex mapping weight of a mapping from the first RO tree to the second RO tree;

a semantic content comparison section for calculating a distance between the first text sentence and the second text sentence on the basis of the calculated distance between the first RO tree and the second RO tree; and

a mapping weight calculation section for calculating a vertex mapping weight of a mapping from the first RO tree to the second RO tree,tree; and

an output section for outputting the calculated distance between the first text sentence and the second text sentence as an indication of semantic content similarity between the sentences,

wherein in the tree structure conversion section,

word information and case information in the first text sentence are assigned to respective vertexes of the first RO tree so that at least one of the vertexes of the first RO tree contains the word information and the case information in the first text sentence,

word information and case information in the second text sentence are assigned to respective vertexes of the second RO tree so that at least one of the vertexes of the second RO tree contains the word information and the case information in the second sentence, and

the vertex mapping weight is calculated on the basis of word substitution weight, word deletion weight, word insertion weight, case substitution weight, case deletion weight and case insertion weight.

23.   (Canceled)

24.   (Previously Presented) The text sentence comparison apparatus according to claim 22, wherein:

the tree structure conversion section

allots words included in the first text sentence to vertexes of the first RO trees, and

allots words included in the second text sentence to vertexes of the second RO trees; and

the vertex mapping weight calculation section calculates the vertex mapping weight on the basis of word substitution weight, word deletion weight, and word insertion weight.

25.   (Canceled)

26.   (Original) The text sentence comparison apparatus according to claim 22, further comprising:

a setting input section for allowing a user to set the condition of the mapping between the two RO trees.

27.   (Original) The text sentence comparison apparatus according to claim 22, wherein the condition of the mapping between the two RO trees includes:

the mapping is a one-to-one mapping;

the mapping preserves parent-child relationship; and

the mapping preserves brother relationship;

the mapping preserves structure.

28.   (Original) The text sentence comparison apparatus according to claim 22, further comprising:

an output section for outputting the calculated distance between the first text sentence and the second text sentence.